



# Indiana State Department of Health

## Weekly Influenza Report

### Week 13

Report Date: Friday, April 08, 2016

The purpose of this report is to describe the spread and prevalence of influenza-like illness (ILI) in Indiana. It is meant to provide local health departments, hospital administrators, health professionals and residents with a general understanding of the burden of ILI. Data from several surveillance programs are analyzed to produce this report. Data are provisional and may change as additional information is received, reviewed and verified. For questions regarding the data presented in this report, please call the ISDH Surveillance and Investigation Division at 317-233-7125.

#### WEEKLY OVERVIEW

| Influenza-like Illness - Week Ending April 2, 2016               |         |
|--|---------|
| ILI Geographic Distribution                                      | Local   |
| ILI Activity Code  | Minimal |
| Percent of ILI reported by sentinel outpatient providers         | 1.80%   |
| Percent of ILI reported by emergency department chief complaints | 1.58%   |
| Percent positivity of influenza specimens tested at ISDH         | 43.75%  |
| Number of influenza-associated deaths to date                    | 53      |
| Number of long-term care facility outbreaks                      | 0       |
| Number of school-wide outbreaks                                  | 0       |



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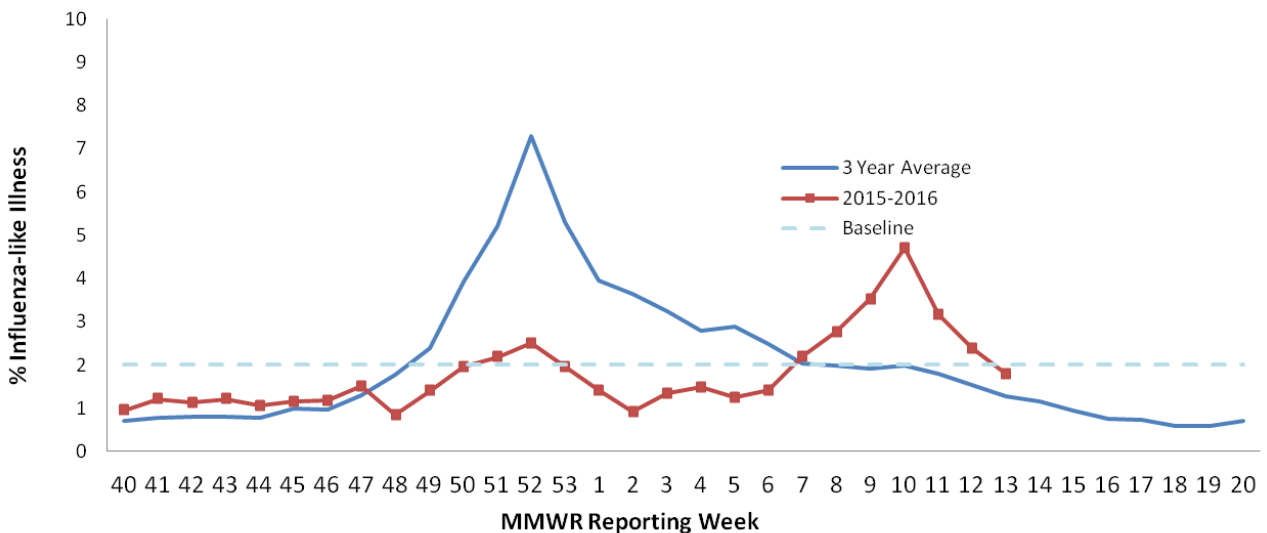
## SENTINEL SURVEILLANCE SYSTEM

Data are obtained from sentinel outpatient providers participating in the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet). Data are reported on a weekly basis for the previous Morbidity and Mortality Weekly Report (MMWR) Week by the sentinel sites and are subject to change as sites back-report or update previously submitted weekly data.

| Percent of ILI Reported by Type of Sentinel Outpatient Facility, Indiana, 2015-2016 Season |                        |                       |                           |
|--|------------------------|-----------------------|---------------------------|
| MMWR Week  | All Reporters %ILI (n) | Universities %ILI (n) | Non-Universities %ILI (n) |
| <b>13</b>  | 1.80% (20)             | 1.40% (9)             | 2.00% (11)                |
| <b>12</b>  | 2.39 (24)              | 2.59 (9)              | 2.30 (15)                 |
| <b>11</b>  | 3.17 (23)              | 1.83 (9)              | 3.66 (14)                 |

| Percent of ILI Reported by Age Category in Sentinel Outpatient Facilities, Indiana, 2015-2016 Season |                     |                |
|--|---------------------|----------------|
| Age Category, years  | Total Number of ILI | Percent of ILI |
| 0-4  | 24                  | 26.97%         |
| 5-24   | 51                  | 57.30          |
| 25-49  | 13                  | 14.61          |
| 50-64  | 1                   | 1.12           |
| 65+  | 0                   | 0              |
| Total  | 89                  | --             |

Percent of Patients with Influenza-like Illness (ILI) in Provider Clinics, Indiana, 2015-2016





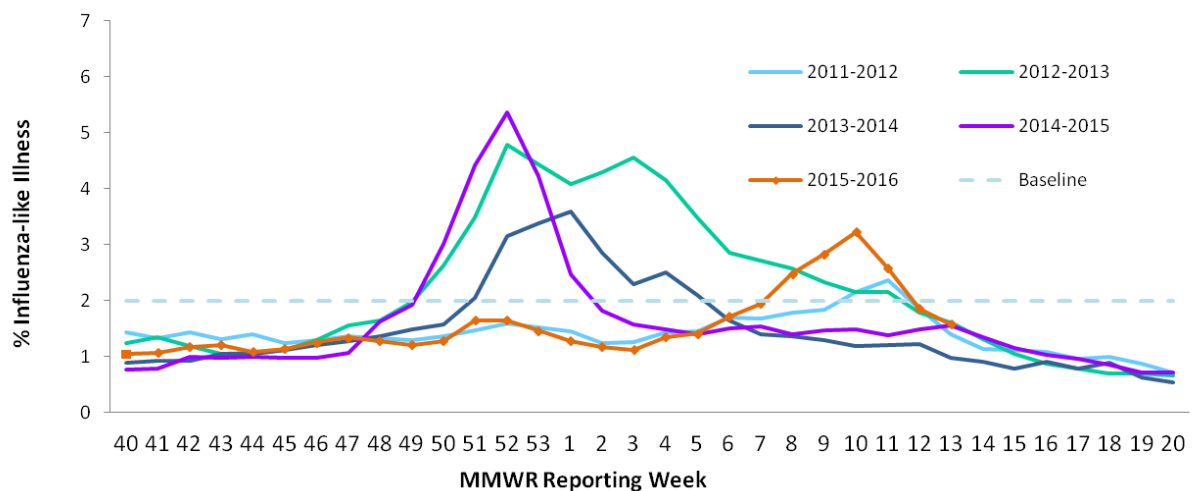
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### **SYNDROMIC SURVEILLANCE SYSTEM**

Data are obtained from hospital emergency department chief complaint data through the Indiana Public Health Emergency Surveillance System (PHESS). Data are reported on a weekly basis for the previous Morbidity and Mortality Weekly Report (MMWR) Week and are subject to change as hospitals back-report or update previously submitted weekly data.

| Percent of ILI Reported in Emergency Departments by District, Indiana, 2015-2016 Season |                    |                   |
|---|--------------------|-------------------|
|   | Previous MMWR Week | Current MMWR Week |
| Indiana   | 1.86%              | 1.58%             |
| District 1  | 1.37               | 1.34              |
| District 2  | 1.63               | 1.88              |
| District 3  | 1.31               | 0.90              |
| District 4  | 1.85               | 1.38              |
| District 5  | 1.97               | 1.63              |
| District 6  | 2.25               | 2.13              |
| District 7  | 1.94               | 1.90              |
| District 8  | 2.62               | 1.65              |
| District 9  | 2.72               | 1.95              |
| District 10   | 1.68               | 1.09              |

Percent of Patients with Influenza-Like Illness (ILI) Chief Complaint in Emergency Departments, Indiana, 2015-2016





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### **INFLUENZA-ASSOCIATED MORTALITY**

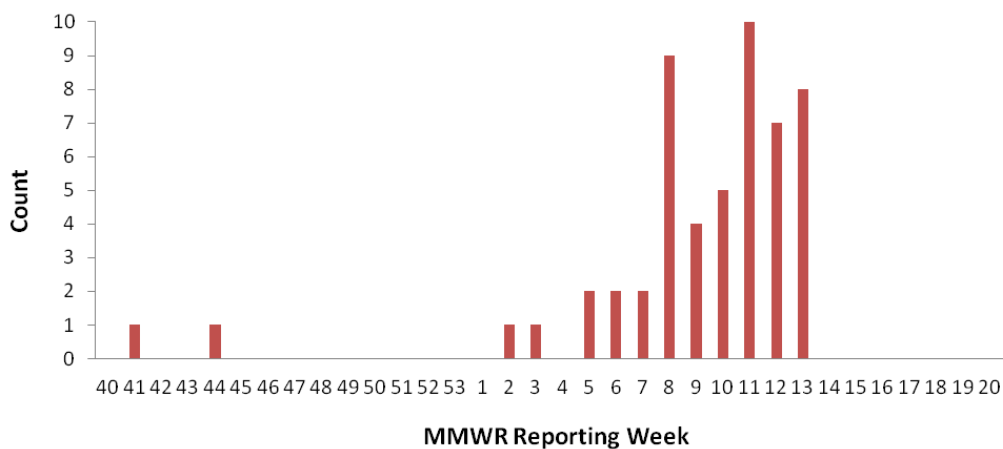
Data are obtained from the Indiana National Electronic Disease Surveillance System (I-NEDSS). Influenza-associated deaths are reportable within 72 hours of knowledge; however, not all cases are reported in a timely manner so data in this report are subject to change as additional cases are back-reported.

| Number of Influenza-Associated Deaths for All Ages*, Indiana, 2015-2016 Season |              |
|--|--------------|
| Age Category, years  | Season Total |
| 0-4  | 0            |
| 5-24   | 4            |
| 25-49  | 8            |
| 50-64  | 23           |
| 65+  | 18           |
| Total  | 53           |

*\*Due to changes in the reporting rule as of 12/2015, influenza-associated deaths are reportable if either laboratory confirmed or listed as cause of death on death certificate. Therefore, case counts are not directly comparable to previous seasons in which influenza-associated deaths were only reportable by laboratory confirmation.*

| Counties with ≥5 Laboratory Confirmed Influenza-Associated Deaths for All Ages, 2015-2016 Season |              |        |              |
|--|--------------|--------|--------------|
| County   | Season Total | County | Season Total |
| Lake   | 11           |        |              |
| Marion   | 16           |        |              |
|  |              |        |              |

**Number of Reported Influenza-Associated Deaths by Week of Death, All Ages,  
Indiana, 2015-16**





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### VIROLOGIC SURVEILLANCE

| Circulating Influenza Viruses Detected by ISDH Laboratory*, Indiana, 2015-2016 Season |           |                               |              |                               |
|---|-----------|-------------------------------|--------------|-------------------------------|
| PCR Result  | Week 13   |                               | Season Total |                               |
|   | Number    | Percent of Specimens Received | Number       | Percent of Specimens Received |
| 2009 A/H1N1pdm virus  | 5         | 31.3%                         | 214          | 37.7%                         |
| Influenza A/H3 seasonal virus   | 0         | 0%                            | 69           | 12.2%                         |
| Influenza A/H1 seasonal virus   | 0         | 0%                            | 0            | 0%                            |
| Influenza B seasonal virus  | 2         | 12.5%                         | 34           | 6.0%                          |
| Influenza negative  | 8         | 50.0%                         | 231          | 40.7%                         |
| Inconclusive  | 1         | 6.2%                          | 8            | 1.4%                          |
| Unsatisfactory specimen <sup>†</sup>  | 0         | 0%                            | 11           | 1.9%                          |
| Influenza Co-infection <sup>Δ</sup>   | 0         | 0%                            | 1            | <1%                           |
| <b>Total</b>  | <b>16</b> | <b>100%</b>                   | <b>568</b>   | <b>100%</b>                   |

\* Data obtained from the ISDH Laboratory via specimens submitted from the ISDH Sentinel Influenza Surveillance System and IN Sentinel Laboratories.

<sup>†</sup> Unsatisfactory specimens include specimens that leaked in transit, were too long in transit, or were inappropriately labeled.

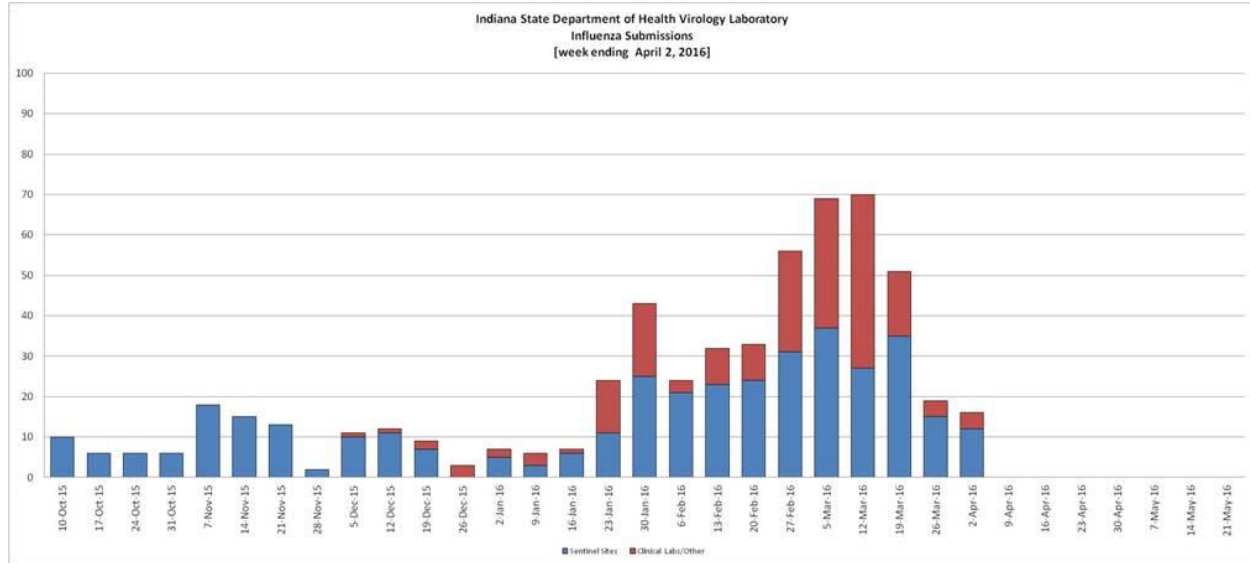
<sup>Δ</sup> Influenza co-infection was influenza A/H3 and influenza A/H1N1pdm.

| Circulating Non-Influenza Viruses Detected by the ISDH Laboratory, Indiana, 2015-2016 Season |          |                                 |  |
|--|----------|---------------------------------|--|
| Result   | Week 13  | Season Total<br>(Since 10/1/15) | Early Surveillance<br>(9/1/15 - 9/30/15) |
| Adenovirus   | 0        | 6                               | 0  |
| Coronavirus 229E   | 0        | 0                               | 0  |
| Coronavirus HKU1   | 0        | 0                               | 0  |
| Coronavirus NL63   | 0        | 0                               | 0  |
| Coronavirus OC43   | 0        | 0                               | 0  |
| Enterovirus NOS  | 0        | 0                               | 0  |
| Enterovirus/Rhinovirus   | 0        | 2                               | 1  |
| Human Metapneumovirus  | 0        | 0                               | 0  |
| Parainfluenza 1 Virus  | 0        | 1                               | 1  |
| Parainfluenza 2 Virus  | 0        | 1                               | 0  |
| Parainfluenza 3 Virus  | 0        | 1                               | 0  |
| Parainfluenza 4 Virus  | 0        | 1                               | 0  |
| Rhinovirus   | 0        | 0                               | 0  |
| Respiratory Syncytial Virus  | 1        | 2                               | 0  |
| <b>Total</b>   | <b>1</b> | <b>14</b>                       | <b>2</b>                                 |



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## VIROLOGIC SURVEILLANCE (GRAPH)





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## **FLU REVIEW**

### **Flu Vaccine Resources**

- The latest Current Issues in Immunization NetConference (CIINC) on March 16 covered the 2016 updates to child, adolescent, and adult immunization schedules; a viewable [recast, transcript, and presentation slides](#) from the event are now available (CDC).
- The [presentation slides](#) from the last Advisory Committee on Immunization Practices (ACIP) meeting have been posted, which include presentations on influenza surveillance, vaccine efficacy, and recommendations.
- For healthcare professionals treating children who received some vaccines in Mexico, the [2016 Binational Immunization Resource Tool for Children from Birth Through 18 Years](#) provides a side-by-side comparison of vaccine recommendations in Mexico and the U.S. (CDC).

### **Flu News and Related Studies**

- Influenza activity in the United States continues to gradually decrease, but remains elevated above the national baseline. Indiana's reported level of flu activity has now been downgraded from widespread to regional. View the [map](#) of weekly influenza activity in the U.S. and the latest [FluView report](#) for more about current influenza activity, trends, and impact throughout the United States (CDC).
- Analysis of a small sample of influenza A-positive subjects found that viable flu virus was detected only slightly more often in cough aerosol particles than in exhalation aerosol particles; since breathing occurs with a much higher frequency than coughing, this suggests that breathing may play a greater role in airborne influenza transmission than coughing ([Influenza and Other Respiratory Viruses](#)).
- Researchers examining the temporal patterns of influenza in 30 countries over 14 years found that tropical countries may experience relatively constant levels of influenza activity throughout the year, rather than seasons of peak activity; therefore, timing influenza vaccination programs based on seasonality would likely prove ineffective for countries in the inter-tropical belt, and establishing surveillance systems in these countries is recommended in order to institute a localized approach to vaccination policy ([PLOS ONE](#)).

### **For Further Information, Visit:**

[www.in.gov/isdh/25462.htm](http://www.in.gov/isdh/25462.htm)

[www.cdc.gov/flu](http://www.cdc.gov/flu)

[www.flu.gov](http://www.flu.gov)